



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,765	12/07/2005	Ikuo Yamamoto	Q91901	8041
23373 7590 06/09/2009 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER PENG, KUO LIANG	
			ART UNIT 1796	PAPER NUMBER
			MAIL DATE 06/09/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/559,765

Applicant(s)

YAMAMOTO ET AL.

Examiner

Kuo-Liang Peng

Art Unit

1796

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/2/09 RCE.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 14-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed May 4, 2009 has been entered. Claim 1 is amended. Claims 10 and 12-13 are deleted. Now, Claims 1-9, 11 and 14-16 are pending.
2. Claim objection(s) in the previous Office Action (Paper No. 20090103) is/are removed.

Claim Rejections - 35 USC § 112

3. Claims 2-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In Claim 2 (lines 2-3), "fluorine-containing monomer" causes confusing because the fluoropolymer recited in Claim 1 derived from a fluorine-containing

monomer of formula (I) that must contain a **specific Rf group**, not derived from **any** fluorine-containing monomer. (Emphasis added)

For Applicants' argument (Remarks, II), Examiner disagrees. Applicants correctly pointed out that the polymer containing both of a fluorine atom and a silicon atom in Claim 2 refers to the fluoropolymer recited in lines 1-3 of Claim 1. As such, the foregoing fluorine atom in the polymer containing both of a fluorine atom and a silicon atom would derived from the monomer of the formula (I) recited in Claim 1, not **any** fluorine-containing monomer.

Claim Rejections - 35 USC § 102 and 103

4. Rejection of Claims 1-3, 5-6, 11 and 14 under 35 USC 102(b) as being anticipated by Inukai (US 5 128 389) is maintained because the rejection is adequately set forth in paragraph 6 of Paper No. 20090103. Applicant's arguments have been fully considered but they are not persuasive. The focus argument related to the core patentability is discussed below.

For Applicants' argument (Remarks, IV), Inukai teaches the employment of the monomers such as $\text{CH}_2=\text{CFCOOCH}_2\text{C}_2\text{F}_5$, $\text{CH}_2=\text{CHFCH}_2\text{COOCH}_2\text{CF}_3$,

$\text{CH}_2=\text{CFCOOCH}_2\text{C}(\text{CF}_3)\text{FOCF}_2\text{C}(\text{CF}_3)\text{FOC}_3\text{F}_7$, etc. (col. 2, line 28 to col. 3, line 6)

5. Claims 1-9, 11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP472 (JP 63-101472) in view of Ohmori (US 5 021 501).

JP472 discloses a surface treatment agent for **fabrics** made of synthetic or natural fibers comprising 1) a fluorine-containing water/oil repellant and 2) a polysiloxane. (page 2, upper right column to lower right column and page 3, lower right column) The amount of the polysiloxane is illustrated in Examples. The fluoro-containing water/oil repellent is derived from a **fluoroacrylate**, a vinyl-containing **siloxane monomer** and a **fluorine/silicon-free monomer**. (page 2, lower right column to col. 3, upper left column) JP472 is silent on the employment of the claimed **α -substituted** fluoroacrylate. However, Ohmori teaches the use of, in composition A), a fluoropolyacrylate prepared from a monomer mixture containing an **α -substituted** fluoroacrylate represented by formula (1) in a **water/oil repellent** composition (Composition B) for treating **carpet, fabrics (textiles)** such as skirts, curtains, etc. (col. 1, lines 29-50, col. 2, line 25 to col. 3, line 13 and col. 7, lines 24-44). Additional monomer such as $\text{CH}_2=\text{C}(\text{CH}_3)\text{COO}-\text{CH}_2\text{CH}_2\text{CH}_2\text{Si}(\text{OCH}_3)_3$ can be included in the monomer mixture. (col. 3, lines 6-

19) The amounts of these two components are described in col. 3, lines 33-38.

Ohmori further teaches the use of , in composition B, a fluoropolyacrylate prepared from a monomer mixture containing i) an **α -substituted** fluoroacrylate containing **trimethylsilyl** or **trimethylsilylpropyl** group represented by formula (3), ii) an **α -substituted** fluoroacrylate represented by formula (4), and iii) an monomer free of fluorine and silicone such as ethylene, propylene, acrylates, methacrylates, in a water/oil repellent composition for treating **carpet, fabrics (textiles)** such as skirts, curtains, etc. The amounts of the components are also illustrated. (col. 1, line 51 to col. 2, line 18, col. 3, lines 1-19, col. 3, line 57 to col. 5, line 50 and col. 7, lines 24-44) The motivation for utilizing the specific **α -substituted** fluoroacrylates is to afford tough coatings exhibiting **superior adhesion** to the article to be treated as compared to the conventional water/oil repellent compositions. (col. 1, lines 23-26 and col. 7, lines 37-44) In light of the benefit, it would have been obvious to incorporate Ohmori's fluoropolyacrylate into JP472's composition with expected success. Especially, Ohmori is in the same field as that of JP472's endeavor.

For Applicants' argument (Remarks, page 8, last paragraph bridging to col. 9, 1st paragraph), Applicants are advised that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of

references. *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

For Applicants' argument (Remarks, page 9, 2nd paragraph), Examiner disagrees. Ohmori does disclose the claimed fluorine-containing monomers, e.g., $\text{CH}_2=\text{CFCOOCH}_2\text{C}_2\text{F}_5$, etc. (col. 2, lines 49-55) Notably, the working examples merely represent preferred embodiments. Ohmori certainly does not teach away the employment of the monomers falling within the scope of the present invention.

For Applicants' argument (Remarks, page 9, 3rd to 4th paragraph), Examiner disagrees. The arguments of counsel cannot take the place of evidence in the record. *In re Schulze*, 346 F.2d 600, 602, 145 USPQ 716, 718 (CCPA 1965); *In re Geisler*, 116 F.3d 1465, 43 USPQ2d 1362 (Fed. Cir. 1997) Applicants' assertion appears to be merely an opinion, not evidence.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang Peng whose telephone number is (571) 272-1091. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim Seidleck, can be reached on (571) 272-1078. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

klp
June 5, 2009

/Kuo-Liang Peng/
Primary Examiner, Art Unit 1796